

Notice of Allowability

Application No.

10/616,915

Examiner

LOHA BEN

Applicant(s)

REPETTO ET AL.

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' application dated July 11, 2003.
2. ☒ The allowed claim(s) is/are 1-43.
3. ☒ The drawings filed on 17 December 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Loha Ben
Primary Examiner

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Claims

In claim 7: line 2, after "obtained", -- in -- has been inserted, since this was clearly intended.

In claim 15: line 4, "aluminium" has been replaced with -- aluminum --.

Full amended language of claims 7 and 15 is given below.

7. (Currently Amended) The light guide according to claim 1, wherein the coupling device is obtained in such a way that the beams propagate in the body of the light guide in such a way that any section of the surface of the guide in the direction of propagation is touched by the beams.

15. (Currently Amended) The light guide according to claim 3, wherein the surface of said saw-tooth profiles is coated with a material chosen in the group comprising chromium and [aluminium] aluminum.

In the Abstract

The abstract submitted contains three paragraphs. This is not permitted. It should be in a single paragraph. New abstract with single paragraph is given below.

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ABSTRACT

A light guide for display devices of the head-mounted or head-up type comprises:

- a body of the light guide (22) at least in part transparent to visible light;
- a coupling device (24) associated to the body of the light guide (22) and designed to couple the body (22) to an optical system (18) designed to generate an image, the coupling device (24) being obtained in such a way that the light beams coming from the optical system (18) enter the body of the light guide (22) and propagate within the body (22) by total internal reflection; and
- an image-extraction grating, designed to extract the light beams that propagate in the body of the light guide (22) so as to enable an observer to visualize the extracted image against a background visible in transparency through the body of the light guide (22), wherein the extraction grating (32) is set in the proximity of one of the outer surfaces of the guide and has a saw-tooth profile, and wherein the extraction grating (32) is coated with a partially reflecting coating deposited prevalently on the surfaces of the teeth that are least inclined with respect to the surfaces of the guide.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Best reference noted is Richard et al. However, despite the fact that this reference teaches every limitation now claimed in the sole independent claim 1, the extraction grating of Richard et al does not have the saw-tooth profile. Without this profile, the coating characteristic that is now laid out in claim would automatically not exist in the patent's device. In view of this difference, it is concluded that the present invention distinguishes over the prior art .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on Monday to Saturday, generally between 12:00 noon and 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on Monday to Friday, at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 11, 2004



Loha Ben
Primary Examiner